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Continuing with FIG. 16, the latching connector 50 includes a first pivot pin 310A, a second pivot pin 310B, a first L-shaped member 320A, a second L-shaped member 320B, and a plurality of electrical pins 350. In addition, the latching connector 50 includes a first latching hook 330A, a second latching hook 330B, and a tab 340.

The pivot pins 310A and 310B are held in respective recesses formed on the outer back cover 20A. The latching connector 50 rotates about the pivot axis formed by the pivot pins 310A and 310B. In FIG. 16, the latching connector 50 is in a latched position. The latching connector 50 can be moved to an unlatched position by rotating the latching connector 50 in a clockwise direction.

Each L-shaped member 320A and 320B engages a respective recess 270A and 270B of the communication port 260 of the exemplary personal digital assistant 200 to couple the latching connector 50 to the exemplary personal digital assistant 200.

Each latching hook 330A and 330B is operable to securely maintain the latching connector 50 in the latched position. In an embodiment, each latching hook 330A and 330B engages a respective latching member 385A and 385B of the outer back cover 20A.

In an embodiment, the latching connector 50 is rotated from the latched position to the unlatched position when a sufficient force is applied to the tab 340 (e.g., pressing with a finger). The sufficient force unlatches the latching hooks 330A and 330B. When rotated to the latched position while the case 100 is in the closed position, the latching connector 50 engages the communication port 260 with a rotating motion so that to enable a wiping interaction between the electrical pins 350 of the latching connector 50 and the electrical contacts 265 of the communication port 260 so that to remove surface debris or surface contamination such as dust, lint, or any other material. The outer back cover 20A includes an opening for allowing the latching connector 50 to pass through to a position outside the protective housing formed by the front cover and the back cover when rotated between the latched position and the unlatched position. The inner back cover (not shown) covers the recesses of the outer back cover 20A where the pivot pins 310A and 310B are inserted so that to secure the pivot pins 310A and 310B inside the recesses of the outer back cover 20A.

In an embodiment, the latching connector 50 is comprised of a plastic material such as a polycarbonate and acrylonitrile-butadienestyrene (ABS) blend.

FIG. 18 illustrates a recess 98 for inserting a pivot pin 310A and 310B (see FIG. 16) of a latching connector 50 in accordance with an embodiment of the present invention. The recess 98 is formed on the internal surface of the outer back cover 20A (see FIG. 16).

FIG. 19 illustrates a latching hook 330 of a latching connector 50 in accordance with an embodiment of the present invention. The latching hook 330 engages the latching member 385 formed on the internal surface of the outer back cover 20A (see FIG. 16).

FIG. 20 illustrates a rear view of a latching connector 50 in accordance with an embodiment of the present invention, showing the relationship between the tab 340 and the L-shaped members 320A and 320B and the latching hooks 330A and 330B. The L-shaped members 320A and 320B and the latching hooks 330A and 330B extend perpendicular to the tab 340 as illustrated by the dashed lines.

FIG. 20A illustrates a bottom view of a case 100 in accordance with an embodiment of the present invention, showing the case 100 in a closed position and showing the tab 340 accessible by a finger of the user.

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FIG. 21 illustrates a side view of a latching connector 50 of FIG. 16 in accordance with an embodiment of the present invention.

FIG. 22 illustrates the operation of a tab 340 and a latching hook 330A and 330B of a latching connector 50 of FIG. 16 in accordance with an embodiment of the present invention. When a force 8 is applied to the tab 340 to rotate the latching connector 50 to the unlatched position, the latching hooks 330A and 330B experience an inward force 7 perpendicular to the force 8 applied to the tab 340 which causes the latching hooks 330A and 330B to disengage from the latching member of the outer back cover.

FIG. 23 illustrates a latching connector 50 of FIG. 16 being rotated to an unlatched position in accordance with an embodiment of the present invention.

FIG. 24 illustrates a latching connector 50 of FIG. 16 being rotated to a latched position in accordance with an embodiment of the present invention.

In an alternate embodiment, the connector 50 is fixed to the back cover and does not have the pivot pins, the tab, and the latching hook, whereas the connector does not rotate. In this embodiment, the length of the front and back covers is visibly larger than the length of the personal digital assistant so that the communication port is coupled to the connector 50 by sliding the personal digital assistant into the connector 50 while coupled to the rod of the case 100.

The foregoing descriptions of specific embodiments of the present invention have been presented for purposes of illustration and description. They are not intended to be exhaustive or to limit the invention to the precise forms disclosed, and obviously many modifications and variations are possible in light of the above teaching. The embodiments were chosen and described in order to best explain the principles of the invention and its practical application, to thereby enable others skilled in the art to best utilize the invention and various embodiments with various modifications as are suited to the particular use contemplated. It is intended that the scope of the invention be defined by the Claims appended hereto and their equivalents.

What is claimed is:

1. A case for a handheld computer system comprising:
 - a hinge;
 - a first cover coupled to said hinge and having:
 - an outer surface having an opening;
 - a first thickness, and
 - a metallic member coupled to said opening, wherein said metallic member has a second thickness that is smaller than said first thickness;
 - a second cover coupled to said hinge, wherein said hinge allows each of said first and second covers to independently rotate relative to one another to form a protective housing for said handheld computer system; and
 - a communication module integrated into said first cover, said communication module configured to transmit and receive data for said handheld computer system.
2. A case as recited in claim 1 further comprising an electrical link having a first end coupled to said communication module and a second end terminating on said second cover such that to facilitate coupling a communication port of said handheld computer system to said electrical link, wherein a portion of said electrical link is passed through said hinge.
3. A case as recited in claim 2 further comprising a connector coupled to said second end of said electrical link, wherein said connector is configured to couple to said communication port of said handheld computer system.